

ARAC ESHWG REPORT 25.1353(c)(6)**1 - What is underlying safety issue addressed by the FAR/JAR?**

FAR/JAR give requirements relating to nickel cadmium battery installations with regard to protection against battery overheating.

2 - What are the current FAR and JAR standards?**Current FAR text:****Section 25.1353(c)(6)**

(6) Nickel cadmium battery installations capable of being used to start an engine or auxiliary power unit must have -

- (i) A system to control the charging rate of the battery automatically so as to prevent battery overheating;
- (ii) A battery temperature sensing and over-temperature warning system with a means for disconnecting the battery from its charging source in the event of an over-temperature condition; or
- (iii) A battery failure sensing and warning system with a means for disconnecting the battery from its charging source in the event of battery failure.

Current JAR text:**JAR 25.1353(c)(6)**

(6) Nickel cadmium battery installations that are not provided with low-energy charging means must have-

- (i) A system to control the charging rate of the battery automatically so as to prevent battery overheating;
- (ii) A battery temperature sensing and over-temperature warning system with a means for disconnecting the battery from its charging source in the event of an over-temperature condition; or
- (iii) A battery failure sensing and warning system with a means for disconnecting the battery from its charging source in the event of battery failure. [(See ACJ 25.1353 (c)(6)(ii) and (iii).)]

Note: The existing text of JAR 25.1353(c)(6) is such that some confusion exists in the interpretation of the relationship of paragraphs (i) and (ii). JAA Temporary Guidance Material TGM/25/03 was issued to correct the interpretation between these paragraphs. The correct interpretation between JAR 25.1353(c)(6)(i) and JAR 25.1353(c)(6)(ii) is that an 'OR' is to be placed between the two paragraphs.